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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MADSON & AUSTIN 15 WEST SOUTH TEMPLE SUITE 900 SALT LAKE CITY, UT 84101			EXAMINER NGUYEN, BINH AN DUC	
			ART UNIT 3714	PAPER NUMBER
			MAIL DATE 10/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/828,371

Applicant(s)

COOKE, MICHAEL CHARLES

Examiner

Binh-An D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/1/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because:

In the abstract, the phrase "to simulate muscles of part of a players body" (lines 3-4) should be changed to "to stimulate muscles of part of a player's body". Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

In claim 1, the recited phrase "players body" (line 4) should be changed to "player's body". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Thorner et al. (5,565,840).

Referring to claim 1, Thorner et al. teaches a feedback assembly for computer games comprising an output means (i.e., tactile sensation generator 106 having actuators 208)(Fig.2) for delivering stimulation signals to stimulate muscles of part of a player's body (2:10-37); an input means (interface circuit 104) for receiving stimulation signals from a signal generator (game console or computer); and an attachment means

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(pad 200 with straps 212) adapted to attach the output means to a part of the player's body (Figures 1 and 2), wherein the output means (106) is adapted to deliver stimulation signals, in response to activation signals received from the input means at predetermined times to represent events occurring in an activity involving the player (2:9-29). See also, Figures 1-3 and columns 1-4.

Referring to claim 2, Thorner et al. teaches the output means is adapted to deliver stimulation signals at predetermined times corresponding to the times at which feedback signals are received by a data processor with the feedback signals representing events occurring in the activity (2:9-29).

Referring to claim 3, Thorner et al. teaches the predetermined times correspond to the times during the activity during which the player receives a simulated impact (relaying particular predetermined action signals e.g. punches, bullet strikes, etc., during game progress) (2:9-29).

Referring to claim 4, Thorner et al. teaches the input means comprises an input device for connection to an interface means which interconnects the input means and a data processor used for controlling an activity involving the player (3:2-38).

Referring to claim 5, Thorner et al. teaches the feedback assembly comprises at least one accessory which is able to be worn by the player (pad 200)(Fig.2).

Referring to claim 6, Thorner et al. teaches the at least one accessory comprises a casing (vest 210) with the output means (actuators 208) on an inner surface thereof.

Referring to claim 7, the limitation of output means comprises one or more electrodes (actuator 208).

Referring to claim 8, Thorner et al. teaches the casing is adapted to wrap around a person's limb (upper body)(Fig.2).

Referring to claim 9, Thorner et al. teaches the attachment means comprises a strap and hook and loop system (Figures 2-3).

Referring to claim 13, Thorner et al. teaches an interface means (interface circuit 104) which includes the signal generator (2:25-29).

Referring to claim 14, Thorner et al. further teaches the interface means (104) comprises an interface unit having a housing (computer) with at least one feedback assembly input port (parallel port) for receipt of the input means (from game console or computer)(3:3-8).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorner et al. (5,565,840).**

Thorner et al. teaches all limitations of claims 1-9 and 13 above.

Referring to claim 10, Thorner et al. further teaches interface unit includes a plurality of wearable electrodes which is able to deliver stimulation signals independently of each other electrode (3:39-64). Thorner et al. does not explicitly teach a plurality of wearable accessories. It would have been obvious to a person of ordinary

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skill in the art at the time the invention was made to provide additional feedback sensors to other parts of the body to enhance the reality of the game.

Referring to claims 11 and 12, Thorner et al. teaches the input means (interface circuit 104) is wired to the output means (actuators)(3:31-38); an interface means (interface circuit 104) which includes the signal generator (2:25-29).

**Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorner et al. (5,565,840) in view of Huang et al. (6,135,450).**

Thorner et al. teaches all limitations of claims 1-9 and 13 above.

Referring to claims 15-18, Thorner et al. does not explicitly teach the interface unit includes accessory input and output ports and a data processor output port for connecting the interface means to a data processor (claim 15); the accessory input and output ports are adapted to connect the interface unit to at least one controller for controlling operation of the data processor (claim 16); the interface unit is adapted to be connected to a computer console of a computer game (claim 17); the interface means includes a data processor for producing a computer generated activity on a display device (claim 18). Huang et al., however, teaches a wearable vibration device for video games comprising an interface unit (16) (Figs.1, 2, 6) includes accessory input and output ports (Fig.2) and a data processor output port for connecting the interface means to a data processor (2:53-65); the accessory input and output ports are adapted to connect the interface unit to at least one controller (34)(Fig.2) for controlling operation of the data processor (38); the interface unit is adapted to be connected to a computer

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console of a computer game (Figs.2, 6, 7); and the interface means includes a data processor (38) for producing a computer generated activity (on a display device). Note that, the display device is inherent from the video game system. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the separate game interface unit of Huang et al. to the tactile sensation generator of Thorner et al. to provide faster processing speed of the input/output feedback interface of the video game system thus enhance the reality of the game.

Regarding the limitations of signal generator is adapted to be controlled by an adjustment means to vary a parameter of the stimulation signals so as to vary the stimulation signals delivered by the output means to simulate different events occurring during the activity played by the player (claim 19); and the stimulation signals vary in amplitude in direct proportion to the amplitude of the feedback signals (claim 20), it is obvious to control the adjustment parameters of the stimulation signals for comforts.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh-An D. Nguyen whose telephone number is 571-272-4440. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BN



Robert E Pezzuto  
Supervisory Patent Examiner  
Art Unit 3714